



Woodbond 1910

PRODUCT DESCRIPTION

WOODBOND 1910 is a one part adhesive which has met the requirements of the ASTM-D5572 Dry Use standard. WOODBOND 1910 has been specifically formulated for finger jointing of interior stock; offering excellent handling properties and easy extrudability on most fingerjoint application systems.

* While in a developmental stage, Woodbond 1910 was designated as X-404.

PHYSICAL PROPERTIES ¹

Chemical Family Description: Pvac emulsion adhesive

Appearance: white colored liquid

Freeze/Thaw Stable²: yes

Specific Gravity: 1.10

Weight Solids (%): 42-45%

pH: 4.3-4.8

Typical Viscosity (cps): 4400 - 6800

Suggested Minimum Use Temperature³: 6°C

APPLICATION GUIDELINES

The finger jointing of lumber is increasingly popular as a method of reducing wood waste and providing maximum wood utilization resulting in lower raw material costs. Structural and non-structural finger jointed products have gained wide acceptance throughout the wood industry. The preparation of these joints, as well as the adhesive, play a critical role in the quality of finger jointed products. Most failures of finger jointed lumber are caused by poorly machined and poorly fitted dry joints. The adhesive plays a role in finger joint back off, heat and water resistance. However, even the best adhesive available cannot make up for a poor fitting joint. The fit of the dry finger joint should be checked before gluing begins. The following tips may help you in reaching a properly fitting finger joint or trouble shooting finger jointing problems in your operation.

Knives and Cutterhead. Be sure to check overall knife stack for accuracy. Keep cutterheads in pairs and properly cleaned. Cutterheads should be sharpened as a set. Knife set should cut only .3 mm to .8 mm of wood. Knives should be sharpened after running approximately 70 m³ (wood species may cause this to vary).

Cutting Machine. Make sure cutterhead spindle is set vertically with no wear or play in the bearings. Chain carrier lugs should be squared with the trim saws and cutterheads. Make sure trim saws are set true. Check bed rails for wear on a regular basis. Check hold down pressure to provide sufficient pressure to prevent movement of stock while cutting the joint.

Joint Assembly. Pressure should be held constant until joint is cured. End pressure should be set to provide 10-14 Kg/cm² pressure for non-structural joints. Crowder wheels should be aligned to match fingers accurately.

Adhesive Application. Sufficient adhesive spread will provide a uniform coverage that should cover 1/2-2/3 the length of the finger on both sides in a thin continuous film. Make sure fingers aren't skipped and that the adhesive is applied to the whole joint, not just the tips of the fingers. Excess adhesive squeeze-out can cause arcing in a Radio Frequency tunnel. It also causes adhesive build-up and poor adhesive efficiency. Too much adhesive can cause a hydraulic effect in finger joint back off.

PERFORMANCE PROPERTIES

Meets or exceeds the following industry standards:

- **ASTM D-5572 Dry Use**

Finger Joint									
		Test Results				Requirements			
Adhesive	Exposure	Strength (psi)		wood failure%		Strength (psi)		Wood failure %	
		Avg.	Min.	Avg.	Min.	Avg.	Min.	Avg.	Min.
Woodbond 1910 (X-404)	Dry	4,426	N/A	99	90	2,000	N/A	60	30
	Three-Cycle Soak	2,802	N/A	79	30	1,000	N/A	30	15
	Elevated Temp.	2,666	N/A	85	40	1,000	N/A	N/A	N/A

* Testing conducted on Taeda Pine.

Room Temperature Speed of Set: 1.37 (very fast)

RELATED PRODUCTS

If a bond possessing higher interior use water resistance is needed, Multibond EZ-1 or the low chalk version Multibond EZ-2, may be used. If exterior water resistance is required, Franklin International's Multibond X-016 with Catalyst A exceeds the demanding Wet Use requirements of the ASTM 5572.

HANDLING AND STORAGE

Store in tightly closed original container. Protect from freezing. Storing at temperatures above 25°C will reduce the maximum storage time. If thickening, separation or settling occurs, the adhesive should be thoroughly mixed and will then be ready to use again.

Important Notice to Purchaser: Our recommendations, if any, for use of this product are based on tests believed to be reliable. The greatest care is exercised in the selection of our materials and in our manufacturing operations. However, we make no recommendation to use this product in any manner which conflicts with existing laws and/or patents and WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, REGARDING THIS PRODUCT OR ITS USE, INCLUDING MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, THE MANUFACTURER IS NOT LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES OF ANY KIND.

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